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EXAMINER

NGUYEN, CHAU T

ART UNIT

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**Technology Center 2100**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/557,196  
Filing Date: April 21, 2000  
Appellant(s): PERLMAN, STEPHEN G.

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Workman Nydegger  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 07/10/2006 and 08/30/2006 appealing from the Office action mailed 01/11/2006.

**(1) Real Party in Interest**

The Appellant's statement of the real party in interest contained in the brief is correct.

**(2) Related Appeals and Interferences**

The Appellant's statement of the related appeals and interferences contained in the brief is correct.

**(3) Status of Claims**

The Appellant's statement of the status of the claims contained in the brief is correct.

**(4) Status of Amendments**

The Appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of The Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The Appellant's statement on the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

The following is a listing of the evidence relied upon in the rejection of claims under appeal:

Kurtz, US Patent Number 5,574,440, issued on November 12, 1997, but filed on June 8, 1995.

Macrae et al., US Patent Number 6,745,391, issued on June 1, 2004, but filed on April 16, 1999 (hereinafter Macrae).

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurtz, Patent No. 5,574,440, in view of Macrae et al. (Macrae), Patent No. 6,745,391.

As to claims 1, 5, 6, 8-9, and 11-12, Kurtz discloses in a home entertainment system including a central device coupled to a plurality of electronics devices, wherein the plurality of electronics devices includes a display device and a descrambler, and wherein the central device manages the operation of the plurality of electronics devices, a method for tuning channels that are requested by a user for display on the display device, the method comprising the steps for:

receiving user input at the central device, wherein the user input selects a channel that corresponds to a signal carrying programming, and wherein the signal is received by the entertainment system (Abstract, col. 1, line 11 – col. 2, line 7, col. 3, lines 15-39, and Fig. 1: switching apparatus 10 (the central device) is employed with an entertainment installation having a cable signal passing through a cable convert box (descrambler), and user can use a remote control to select a channel);

determining at the central device whether the signal is scrambled or non-scrambled, wherein both the scrambled and the non-scrambled signals have to be tuned before being displayed (Abstract, col. 2, line 37 – col. 3, line 11, col. 4, line 47 – col. 5, line 21 and Fig. 1: the central device has green and red light emitting diodes (LEDs) which indicate the signal is scrambled (premium) or non-scrambled (non premium), either scrambled or non-scrambled signal must be tuned before being displayed, they have to be tuned either by set top box, television, or any device and therefore signals must be tuned before being displayed is an inherent feature at the central device);

if the signal is determined to be scrambled, performing the steps for:

routing the scrambled signal from the central device to the descrambler (col. 3, line 40 – col. 4, line 12, col. 4, line 47 – col. 6, line 18, and Fig. 1 & Fig. 2: the premium signal is output to a converter box (descrambler)); and  
using the descrambler to descramble and tune to one or more channels of the scrambled signal for display on the device (col. 3, line 40 – col. 4, line 12, col.

4, line 47 – col. 6, line 18, and Fig. 1 & Fig. 2: the output of a cable converter box suited for a cable ready TV tuning system); and

if the signal is determined to be non scrambled, performing the step for:

using an internal tuner at the central device to tune to one or more channels of the non-scrambled signal for display on the display device, and such that the non-scrambled signal can be displayed (col. 3, line 40 – col. 4, line 12, col. 4, line 47 – col. 6, line 18, and Fig. 1 & Fig. 2: where the signal source selected is a non-premium (non-scramble) channel input, the viewer is provided the use of all the various built-in programming (tuner) and television receiver).

However, Kurt does not explicitly disclose using the electronic programming guide data stored at the central device to determine whether the signal is scrambled or non-scrambled.

Macrae discloses peripheral devices located within receiving locations (central devices) for receiving data stream, and the data stream includes electronic programming guide (EPG), and software applications located within the peripheral devices determine whether a program is scrambled or unscrambled (col. 1, lines 54-57, col. 3, lines 12-32 and col. 11, lines 10-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Macrae and Kurt to include using the electronic programming guide data stored at the central device to determine whether the signal is scrambled or non-scrambled in turn notify the user that such the signal is available or unavailable for selection.

As to claims 2, 7 and 14, Kurtz and Macrae (Kurtz-Macrae) disclose after descrambling and tuning the scrambled signal at the descrambler, performing the step for sending the descrambled and tuned signal from the descrambler to the central device (Kurtz, col. 10, line 3 – col. 11, line 5).

As to claims 3 and 13, Kurtz-Macrae disclose wherein the descrambler is a cable box (Kurtz, col. 5, lines 53-67).

As to claims 4 and 10, Kurtz-Macrae disclose wherein the user input is sent to the entertainment system by a remote control device (Kurtz, col. 4, lines 47 – col. 5, line 21).

As to claims 15-16, Kurtz-Macrae disclose wherein receiving the signal by the entertainment system comprises receiving the signal at a single input of the central device, such that whether the signal is determined to be scramble or non-scrambled, the signal is received at the single input of the central device (Kurtz, col. 3, line 40 – col. 4, line 12 and col. 5, lines 22-52: an entertainment having a cable signal passing through a cable converter box and which provides both premium and non-premium programming, the connector 23 is labeled "TO CABLE" which is the connection for the input signal of the cable).

As to claim 17, Kurtz-Macrae disclose an input over which both the scramble and non-scrambled signals are received (Kurtz, col. 3, line 40 – col. 4, line 12).

As to claims 18-19, Kurt discloses wherein the routing is automatically performed upon determining that the signal is scrambled, and wherein the signal is automatically tuned by the internal tuner that the signal is non-scrambled (Kurtz, col. 3, line 40 – col. 4, line 12, col. 4, line 47 – col. 6, line 18, and Fig. 1 & Fig. 2: the premium signal is output to a converter box (descrambler), and either scrambled or non-scrambled signal must be tuned before being displayed, they have to be tuned either by set top box, television, or any device and therefore signals must be tuned before being displayed is an inherent feature at the central device).

However, Kurt does not explicitly disclose determining from the electronic programming guide data that the signal is scramble or non-scrambled.

Macrae discloses peripheral devices located within receiving locations (central devices) fro receiving data stream, and the data stream includes electronic programming guide (EPG), and software applications located within the peripheral devices determine whether a program is scrambled or unscrambled (col. 1, lines 54-57, col. 3, lines 12-32 and col. 11, lines 10-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Macrae and Kurt to include using the electronic programming guide data stored at the central device to determine whether



Art Unit: 2176

the signal is scrambled or non-scrambled in turn notify the user that such the signal is available or unavailable for selection).

**(10) Response to Argument**

In the Remarks, Appellant argued in substance that

A. The Examiner has not established a prima facie case of obviousness for any claim (see page 7 of Brief).

In reply to argument A, to establish a prima facie case of obviousness, three basic criteria must be met.

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. In this case, Kurtz discloses an entertainment system having a cable signal passing through a cable converter box and which provides both premium (scrambled) and non-premium (non-scrambled) signals, and viewer is provided the use of all the various built-in programming to tune scrambled or non-scrambled signal before being displayed, they have to be tuned either by set top box, television, or any device and therefore signals must be tuned before being displayed is an inherent feature at the central device, which is similar to software applications located within the peripheral devices determine whether a program is scrambled or unscrambled of Macrae. Thus it would have been obvious in the knowledge generally available to one of ordinary skill in the art at the time the invention

Art Unit: 2176

was made to modify or combine the teaching of Kurtz and Macrae since they both are from the same field of endeavor. The motivation for using the electronic programming guide data stored at the central device to determine whether the signal is scrambled or non-scrambled is in turn notify the user that such the signal is available or unavailable for selection.

Second, there must be a reasonable expectation of success. The prior art can be modified or combined to reject claims as prima facie obvious as long as there is a reasonable expectation of success. In re Merck & Co., Inc., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, the claimed invention directed to a home entertainment system for tuning channels (scrambled and non-scrambled) that are requested by a user for display on a display device was rejected as obvious over Kurtz reference which taught converting a non-premium channel to premium channel through a converter box (Kurtz, col. 3, lines 30-67) and further in view of Macrae reference which taught a television schedule guide which includes a detector for determining whether a program signal is scrambled or unscrambled (Abstract and col. 1, lines 54-57). Thus, there was reasonable expectation that a process combining the prior art steps could be successfully scaled up.

Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

In this case, Kurtz discloses receiving user input at the central device, wherein the user input selects a channel that corresponds to a signal carrying programming, and wherein the signal is received by the entertainment system (Kurtz, Abstract, col. 1, line

Art Unit: 2176

11 – col. 2, line 7, col. 3, lines 15-39, and Fig. 1: switching apparatus 10 (the central device) is employed with an entertainment installation having a cable signal passing through a cable convert box (descrambler), and user can use a remote control to select a channel);

determining at the central device whether the signal is scrambled or non-scrambled, wherein both the scrambled and the non-scrambled signals have to be tuned before being displayed (Kurtz, Abstract, col. 2, line 37 – col. 3, line 11, col. 4, line 47 – col. 5, line 21 and Fig. 1: the central device has green and red light emitting diodes (LEDs) which indicate the signal is scrambled (premium) or non-scrambled (non premium), either scrambled or non-scrambled signal must be tuned before being displayed, they have to be tuned either by set top box, television, or any device and therefore signals must be tuned before being displayed is an inherent feature at the central device);

if the signal is determined to be scrambled, performing the steps for: routing the scrambled signal from the central device to the descrambler (Kurtz, col. 3, line 40 – col. 4, line 12, col. 4, line 47 – col. 6, line 18, and Fig. 1 & Fig. 2: the premium signal is output to a converter box (descrambler));

and using the descrambler to descramble and tune to one or more channels of the scrambled signal for display on the device (Kurtz, col. 3, line 40 – col. 4, line 12, col. 4, line 47 – col. 6, line 18, and Fig. 1 & Fig. 2: the output of a cable converter box suited for a cable ready TV tuning system);

and if the signal is determined to be non scrambled, performing the step for: using an internal tuner at the central device to tune to one or more channels of the non-scrambled signal for display on the display device, and such that the non-scrambled signal can be displayed (Kurtz, col. 3, line 40 – col. 4, line 12, col. 4, line 47 – col. 6, line 18, and Fig. 1 & Fig. 2: where the signal source selected is a non-premium (non-scramble) channel input, the viewer is provided the use of all the various built-in programming (tuner) and television receiver).

Macrae discloses peripheral devices located within receiving locations (central devices) for receiving data stream, and the data stream includes electronic programming guide (EPG), and software applications located within the peripheral devices determine whether a program is scrambled or unscrambled (Macrae, col. 1, lines 54-57, col. 3, lines 12-32 and col. 11, lines 10-34).

B) The prior art cited by the examiner does not use EPG data to determine whether a signal is carrying scrambled or non-scrambled program, and does not teach a tuner located at the central device as required by all claims (See page 7 of the Brief).

In reply to argument B, Macrae et al. discloses a television schedule configured with an EPG database for detecting whether a program signal is scrambled or unscrambled (Abstract and col. 1, line 54 – col. 2, line 10).

Kurt discloses in col. 3, line 40 – col. 4, line 12, col. 4, line 47 – col. 6, line 18, and Fig. 1 & Fig. 2: where the signal source selected is a non-premium (non-scramble) channel input, the viewer is provided the use of all the various built-in programming

Art Unit: 2176

(tuner) and television receiver to tune the signal before being displayed. Also, it's well-known in the art that either scrambled or non-scrambled signal must be tuned before being displayed, they have to be tuned either by set top box, television, or any device. Therefore signals must be tuned before being displayed is an inherent feature at the central device of the applicant's invention.

C) Kurtz does not teach an apparatus or method for determining whether programming is scrambled or non-scrambled (see page 16 of Brief).

In reply to argument C, Appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In this case, Kurtz discloses in col. 2, line 37 – col. 3, line 11, col. 4, line 47 – col. 5, line 21 and Fig. 1: the central device has green and red light emitting diodes (LEDs) which indicate the signal is scrambled (premium) or non-scrambled (non premium). Macrae et al. discloses a television schedule configured with an EPG database for detecting whether a program signal is scrambled or unscrambled (Abstract and col. 1, line 54 – col. 2, line 10).

D) The Examiner conflates “indicating the source of a signal” with “determining whether the signal is scrambled or non-scrambled”.

In reply to argument D, Kurtz discloses the green and red light emitting diodes (LEDs) in the central device to indicate the presence of the signal is scrambled or non-scrambled (col. 17, line 3 – col. 18, line 7), thus Kurtz points out which signal is scrambled and which signal is non-scrambled. Therefore, by indicating or pointing out what type of the signal means determining whether the signal is scrambled or non-scrambled.

E) Kurtz does not teach using a tuning device located at the central electronic device (see page 21 of Brief).

In reply to argument E, this argument is similar to argument B. Examiner points out Kurt discloses in col. 3, line 40 – col. 4, line 12, col. 4, line 47 – col. 6, line 18, and Fig. 1 & Fig. 2: where the signal source selected is a non-premium (non-scramble) channel input, the viewer is provided the use of all the various built-in programming (tuner) and television receiver to tune the signal before being displayed. Also, it's well-known in the art that either scrambled or non-scrambled signal must be tuned before being displayed, they have to be tuned either by set top box, television, or any device. Therefore signals must be tuned before being displayed is an inherent feature at the central device of the applicant's invention.

F) Macrae does not teach using EPG data to determine whether programming is scrambled or non-scrambled (see page 25 of Brief).

In reply to argument F, Macrae et al. discloses a television schedule configured with an EPG database for detecting whether a program signal is scrambled or unscrambled (Abstract and col. 1, line 54 – col. 2, line 10).

G) The Examiner has not established a motivation to combine Kurtz and Macrae (see page 26 of Brief).

In reply to argument G, in response to Appellant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Kurtz discloses an entertainment installation having a cable signal passing through a cable converter box and which provides both premium (scrambled) and non-premium (non-scrambled) programming. Macrae discloses a television schedule guide (electronic programming guide) including a detector for determining whether a previously scrambled program is unscrambled (Abstract and col. 1, lines 54-57, col. 3, lines 12-32 and col. 11, lines 10-34), which relates to cable signal passing through a cable converter box providing both premium (scrambled) and non-premium (non-scrambled) programming of Kurtz (Kurtz, col. 3, line 40 – col. 4, line 12), therefore, Macrae and Kurtz are analogous art.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Macrae and Kurtz to include using the electronic programming guide data stored at the central device to determine whether the signal is scrambled or non-scrambled in order to notify the user that such the signal is available or unavailable for selection.

H) The prior art cited by the Examiner does not disclose a central device that receives user input wherein the user input selects a channel that corresponds to a signal carrying programming as required by claims 1-4, 15 and 18 (see page 27 of Brief).

In reply to argument H, Kurtz discloses in Abstract, col. 1, line 11 – col. 2, line 7, col. 3, lines 15-39, and Fig. 1: switching apparatus 10 (the central device) is employed with an entertainment installation having a cable signal passing through a cable convert box (descrambler), and user can use a remote control to select a channel.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.



Art Unit: 2176

For the above reasons, it is respectfully submitted that the rejections should be sustained.

Respectfully Submitted,

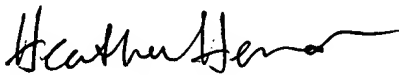
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